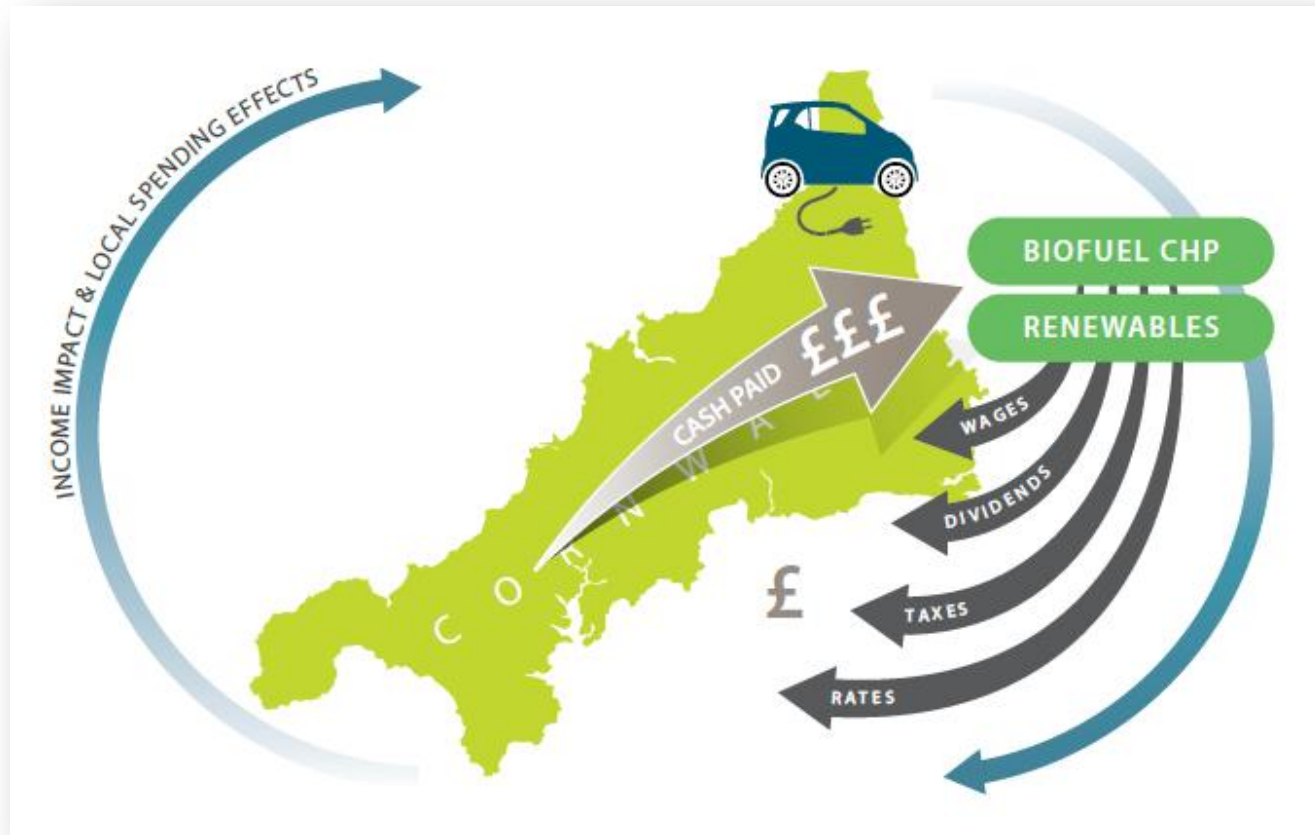




# Local Energy Devolution in Practice

Dan Nicholls  
Cornwall Council

# Cornwall's journey - local energy economy



# Cornwall's energy spend

## Business as usual



**98%**

of Cornwall's energy spend currently leaves the local economy of which 30% is on electricity

## Cornwall's local energy market



**70%**

of Cornwall's electricity spend could be kept in the local economy



Generating jobs



Increasing wages



Health benefits

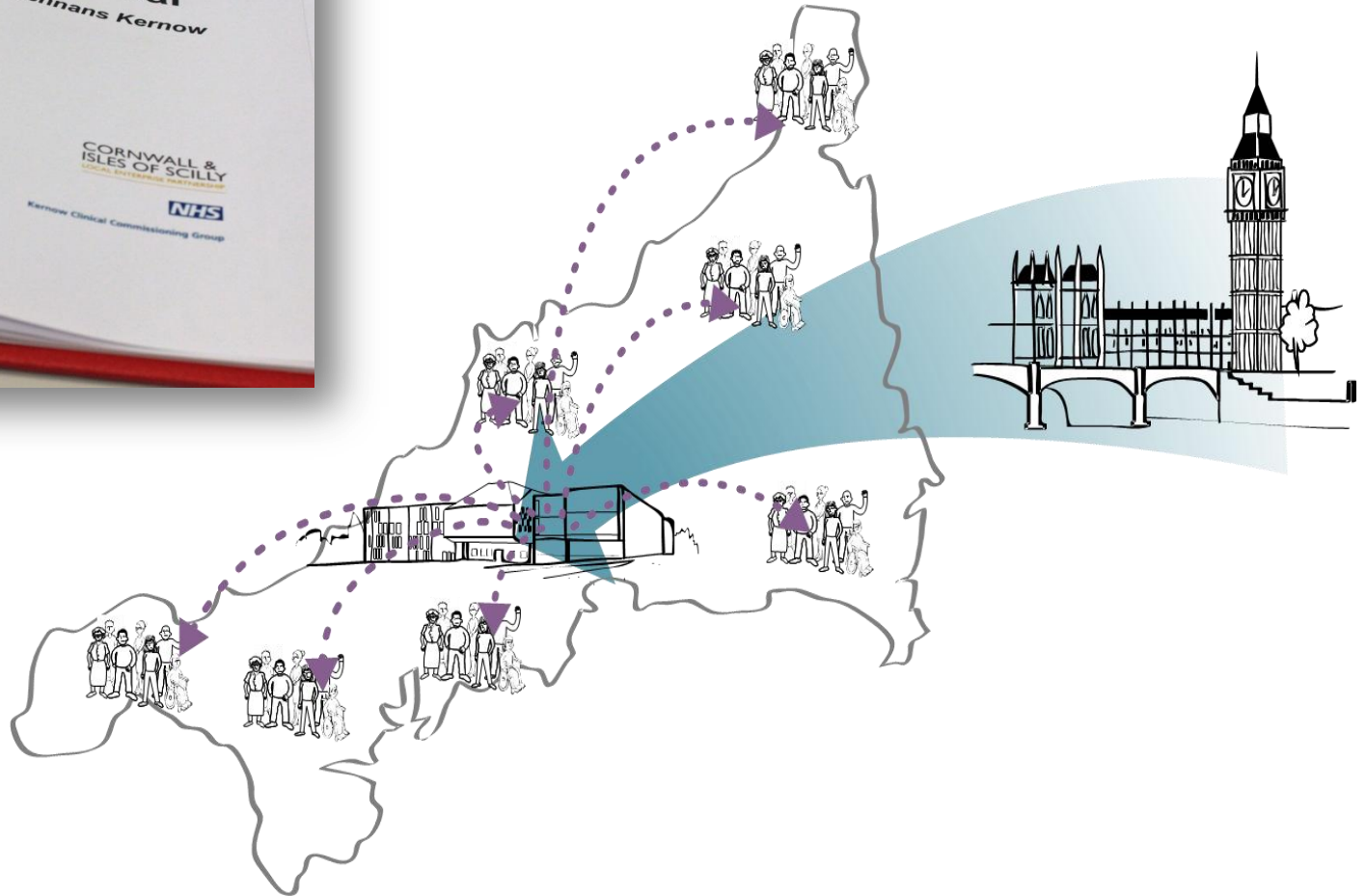


Education opportunities



Reducing carbon footprint

# Cornwall Devolution Deal



# Devolution focus

## Barriers

ECO programme  
poor fit for  
Cornwall

Grid  
constraints

Stagnating  
community  
energy groups

Poor economic  
benefit from new  
technologies

## Cornwall Deal

Energy  
Efficiency  
pilot

Grid and  
Storage  
pilots

Community  
ownership  
pilots

Geothermal  
and Enterprise  
Zones



# Supporting communities

Supporting the growth of community energy in Cornwall and beyond

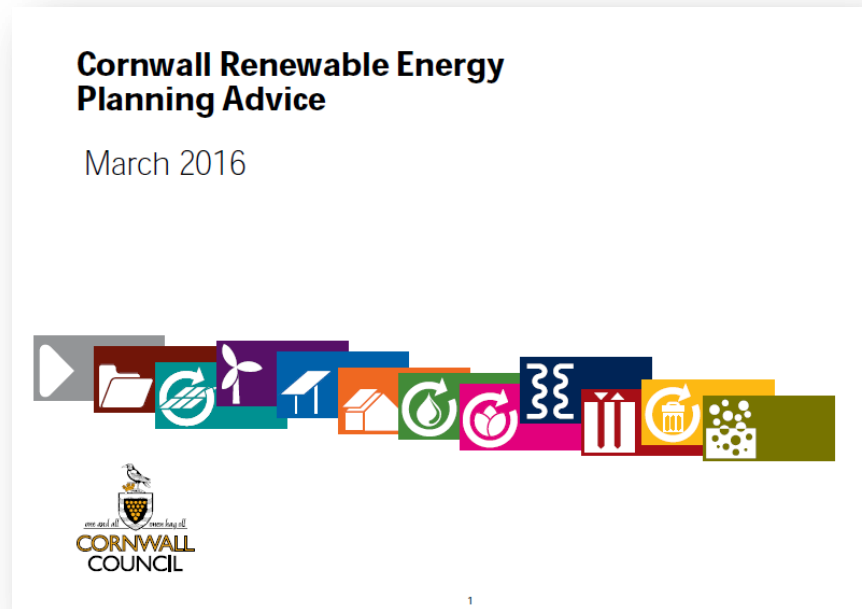
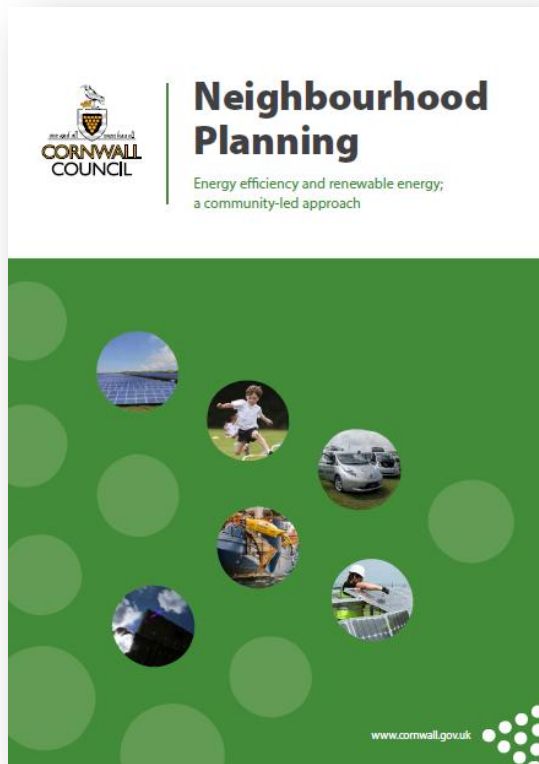


## Cornwall Revolving Loan Fund

- £800k loaned
- £1m committed
- 1.5MW enabled



# Supporting communities - Planning

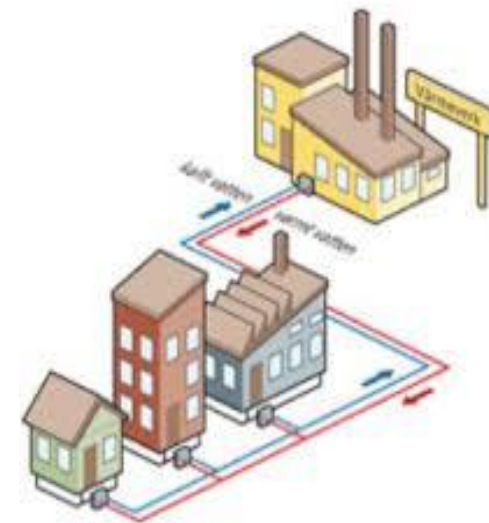


<http://www.cornwall.gov.uk/renewableenergy>

# Supporting communities - Innovation

## Cornwall Devolution Deal

- Community heat (off gas)
- Community supply



# Green transport

Developing the largest rural electric vehicle charging network



# Electric car charging network

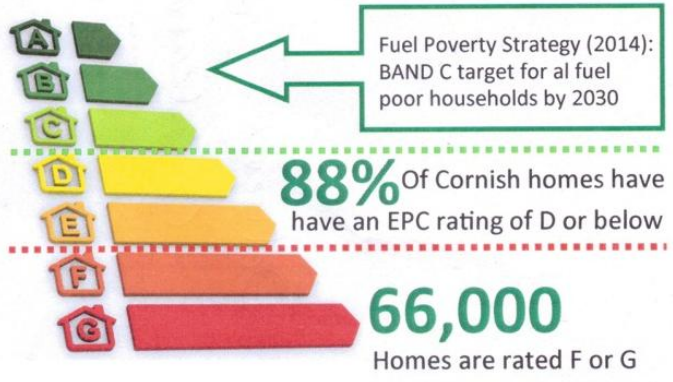


# Affordable homes

Opening up ECO to local people that need it

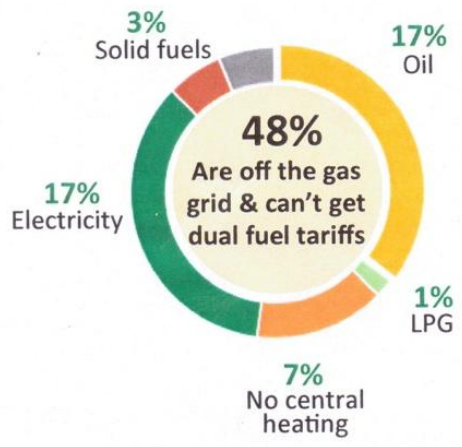


# Energy efficiency

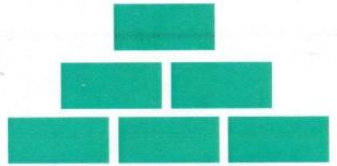


Mean SAP rating is  
**48:**  
**BAND E**

## How off-gas homes are heated



**30%**  
Of housing stock is already over 100 years old (built pre 1919)



**40%**  
Of homes have solid walls and therefore no cavity wall insulation

# Green economy

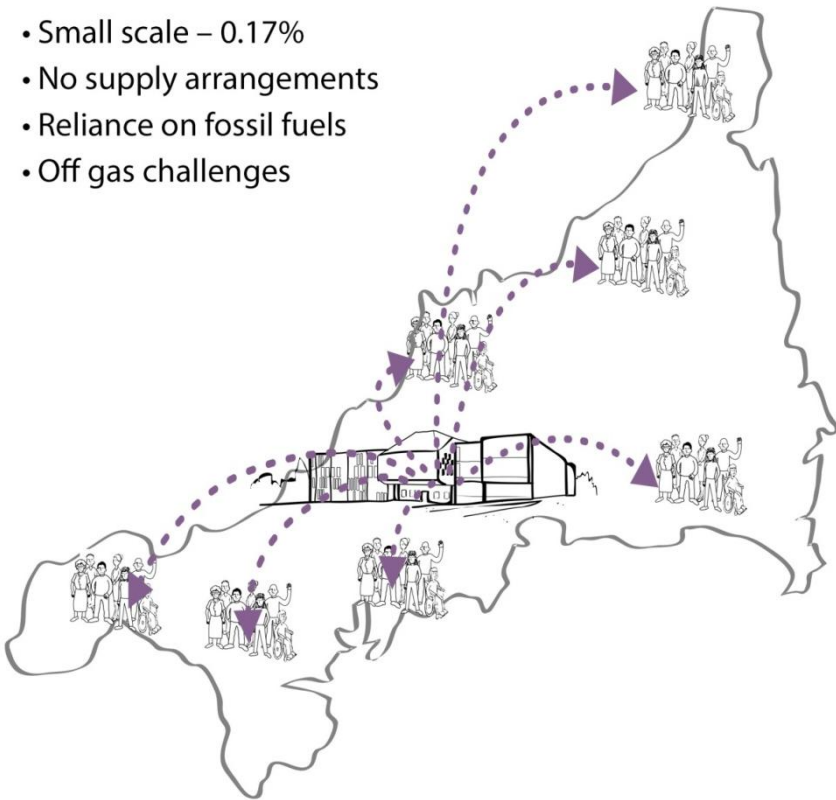
Fostering green innovation, new technologies and opportunity



# New capacity and local ownership

## Community energy

- Small scale – 0.17%
- No supply arrangements
- Reliance on fossil fuels
- Off gas challenges

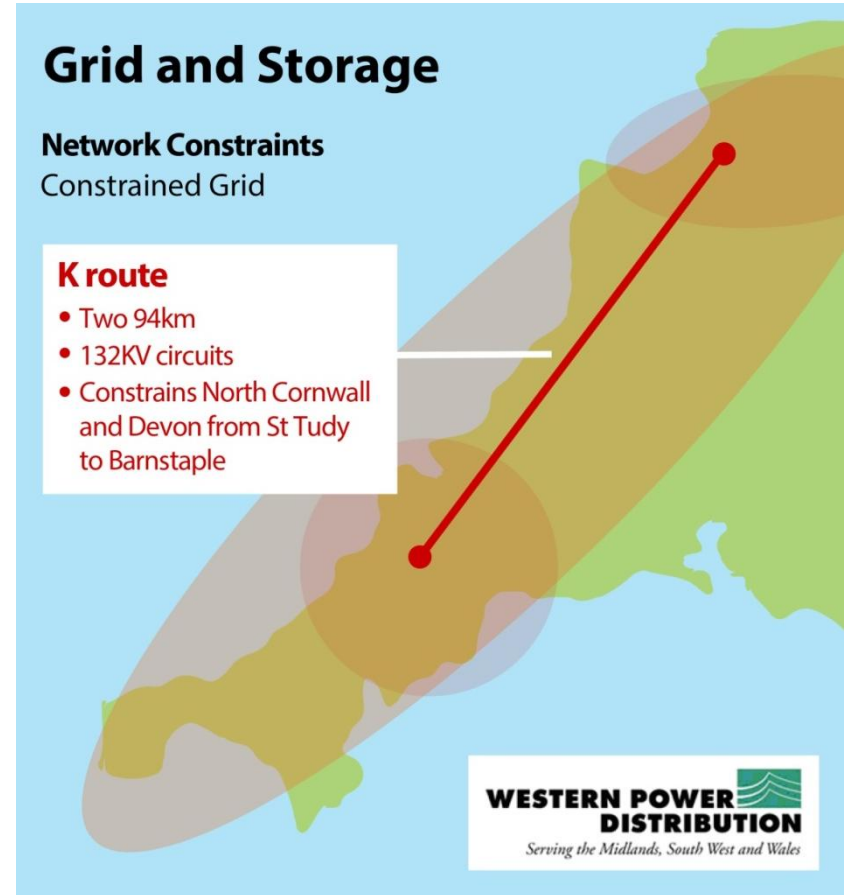


## Grid and Storage

**Network Constraints**  
Constrained Grid

### K route

- Two 94km
- 132KV circuits
- Constrains North Cornwall and Devon from St Tudy to Barnstaple



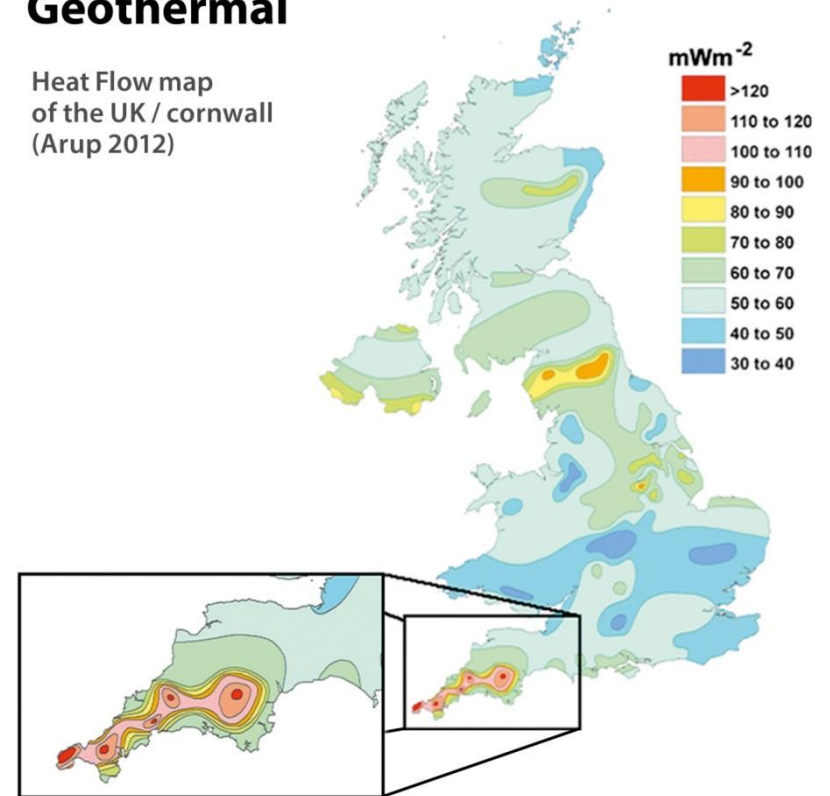
# New technologies

## Enterprise Zones

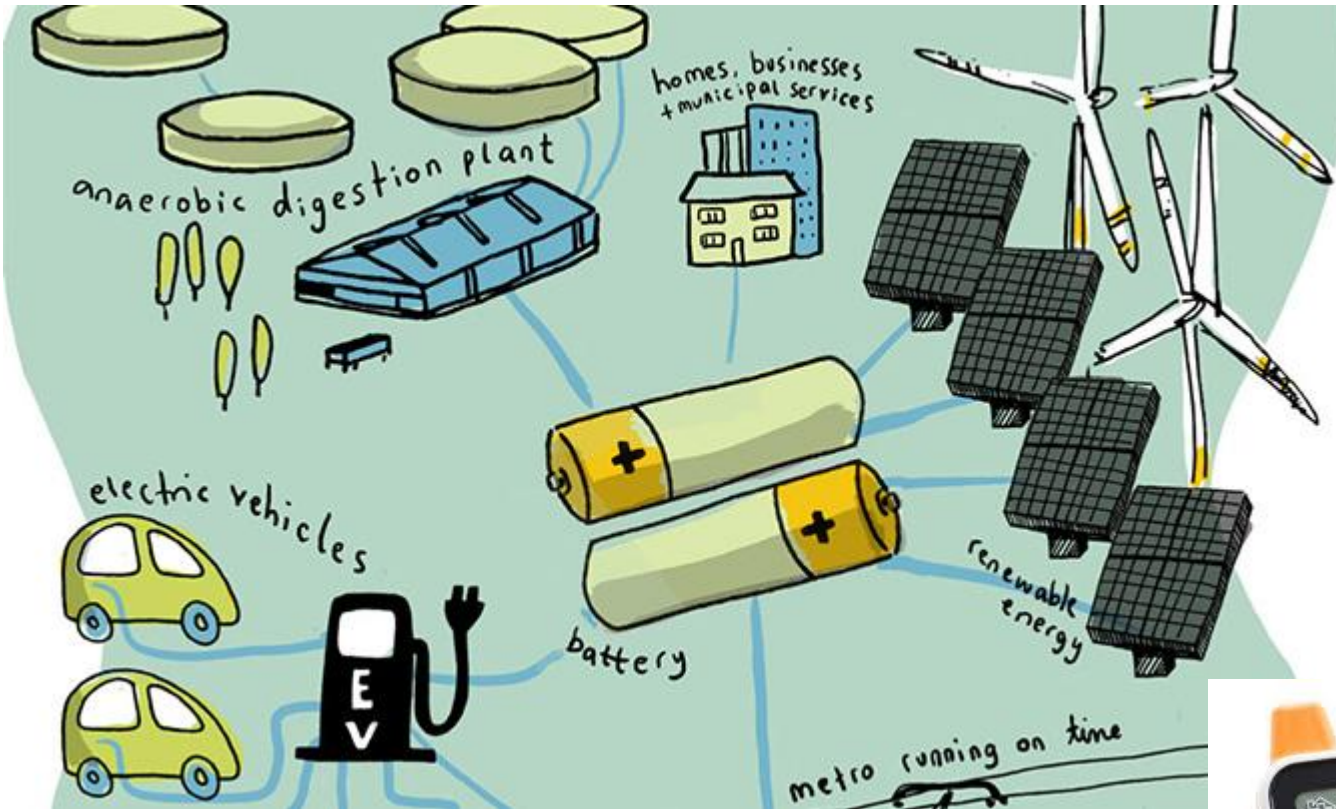


## Geothermal

Heat Flow map of the UK / Cornwall (Arup 2012)



# Smart & local energy market



# Cornwall's local energy economy

